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# AVICULTURAL MAGAZINE



VOLUME 120  
No. 1  
2014

# THE AVICULTURAL SOCIETY

The Avicultural Society was founded in 1894 for the study of British and foreign birds in the wild and in captivity. The Society is international in character, having members throughout the world.

Membership subscription rates per annum for 2014: British Isles £21.00: Overseas £24.00 (plus £6.00 for airmail). (UK funds please). Full-time students £12, Overseas £15 (please state course attended). The subscription is due on **1st January of each year** and those joining the Society later in the year will receive back numbers of the current volume of the AVICULTURAL MAGAZINE.

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The AVICULTURAL MAGAZINE welcomes articles and news items from both members and non-members (no payment is made). These can be about any aspect of aviculture, conservation or natural history concerning non-domesticated bird species that is likely to be of interest to aviculturists. Articles submitted for publication should preferably not have been published elsewhere, and should ideally be written in English, though translation is possible. Scientific as well as vernacular bird names should be given, and references cited in the text should be listed at the end of the article. Material can be sent as an email attachment to [editor@avisoc.co.uk](mailto:editor@avisoc.co.uk) and can be accepted in most common file formats. Files on disk and typed or handwritten manuscripts are also accepted. Line drawings, black and white or colour photographs can be used to illustrate articles and should be clearly captioned. Tables and graphs submitted will be used whenever possible. Graphs should ideally be accompanied by the relevant source data.

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THE JOURNAL OF THE AVICULTURAL SOCIETY

Vol. 120 - No. 1

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2014

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IN THE WILD AND CAPTIVITY

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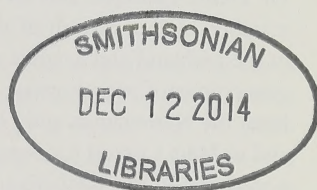
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## FROM THE CHAIRMAN

I write this on returning from the Society's interesting and enjoyable trip to northern France. We visited both the historic zoo in the Jardin des Plantes in Paris and the excellent zoo at Amiens; but the highlights of the trip for me were our visits to the home of our Vice President Dr Henri Quinque and to the Parc de Clères. Dr Quinque's remarkable collection was matched by the warmth of the welcome we received, and at Clères we saw animals and birds in the parkland and aviaries created by our former President Jean Delacour, an inspiration to generations of aviculturists. The party, predominantly from the UK, was joined by members from the Netherlands and Germany. Our thanks to our hosts at all the collections we visited and to Mike Curzon for organising yet another successful trip. Plans are already under way for a weekend in the Netherlands in September 2015, to include visits to some very interesting private and public collections.

This magazine is the first to be produced by our new printers, Heron Press Ltd of Westbury, and the first to feature a full-colour photographic cover. We are very grateful to Bjorn Andersen for his superb cover picture of a Blue-crowned Laughingthrush *Garrulax courtoisi* and would welcome your high-quality photographs for future issues.

In the last issue I wrote that there would be only two issues this year, however the next magazine you receive will be the complete index to the Avicultural Magazine from 1894-2013, which in terms of pages will be at least a triple issue, so you will in effect receive four magazines this year. This mammoth undertaking has been completed by Dave Coles, who has also compiled the News & Views section of this magazine. I am very pleased to report that the winner of the inaugural Raymond Sawyer Scholarship has been selected – details elsewhere in the magazine.

We hope you enjoy your new-look Avicultural Magazine – please let us know what you think and, as ever, please send in articles for the coming issues.

**Nigel Hewston**



## BREEDING THE TWELVE-WIRED BIRD-OF-PARADISE *Seleucidis melanoleucus* IN WELTVOGELPARK WALSRODE - AGE IS NOT AN OBSTACLE!

By Anne Hoppmann

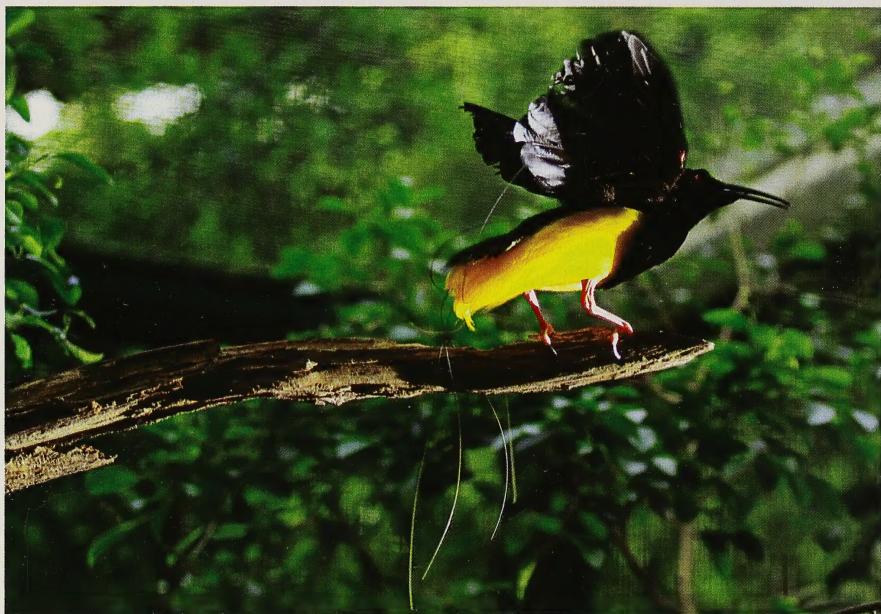
The Birds-of-paradise are among the world's most known and famous bird species due to the often colourful and very exceptional plumage of the males. These small, up to middle sized, passerine birds mostly live in the dense rain forests of New Guinea, but some species can also be found on the Maluku islands and in the northern part of east Australia. Due to its famous inhabitants, New Guinea is also called the 'island of birds of paradise'. The national emblem, as well as the flag of the independent state of Papua New Guinea, even shows a bird of paradise!

In total 42 species are recognized in the family *Paradisaeidae* and the majority of the males have iridescent and brightly coloured plumage on their back, breast and tail feathers. During courtship the shining colours and feathers are presented to a female at special 'leks', or within the territory of a certain female. Therefore, the males of many species clear the ground or branches of foliage to be able to better draw attention to themselves. Most species are polygynous, meaning that a male mates with multiple females, which are rather dull coloured with their brown-yellow plumage which blends in with their habitat. They alone care for the incubation of the eggs and the rearing of the young without the help of the male.

From trading expeditions in the early sixteenth century only the footless and wingless skins were known in Europe. Therefore, the representatives of this bird group were soon called 'divine birds' or 'paradise birds' as it was thought that they do not need wings at all. The skins led to the belief that the birds never landed on earth before their death but were kept permanently aloft by the plumes. Until the 18th century these stories were still believed to be true due to the lack of information about birds of paradise from the wild.

Weltvogelpark Walsrode keeps some species of these famous Birds-of-paradise. One of the larger ones is the Twelve-wired Bird-of-Paradise *Seleucidis melanoleuca* which inhabits rainy and swampy forests in the lowlands of New Guinea and the western Papuan Islands. It feeds on fruit, especially the fruits of the *pandanus* or sago palm, but nectar, insects, frogs or lizards are also eaten. Twelve-wired Birds-of-paradise can be very acrobatic while feeding – they can even hang upside down from branches to investigate holes in the wood for insects. The males of this species are known for their conspicuous black-olive coloured head and wing plumes as well as their brightly yellow plumes on their breast and flanks. The tail feathers, twelve blackish wire-like filaments, emerge at the rear of the plumage and can be moved independently during courtship.

This species is polygynous and in the wild a single male mates with several females. To impress a female, males display on traditional, mostly dead vertical branches free from leaves which tower above the treetops. These typical branches are even defended from other males. Upon the arrival of a female, the male moves his wings, the yellow plumes on his flanks, and the twelve elongated tail feathers while jumping up and down on the branch and singing.



*Twelve-wired Bird-of-paradise male*

This species can only be seen in a zoological institution in Europe in Weltvogelpark Walsrode. In 2008 Walsrode received a male Twelve-wired Bird-of-paradise, called 'Van Dyke', from Bronx Zoo in New York – already over 30 years of age! It was believed that this bird was for exhibition but not for breeding purposes anymore – but all were wrong! Despite the age of the male, our female laid the first fertilized eggs in 2012, after being relocated to another enclosure in the rainforest hall. By September 2012, a total of 7 chicks had been successfully hand reared.

In the wild, the female builds a shallow egg-cup shaped nest of small branches and leaves inside a bulky deep structure of pandanus bark and vines, which is padded with rootlets and plant fibres. It is usually placed in palm trees up to 14 m above the ground. Normally, one egg and rarely two are laid. After an incubation period of approximately 20 days the chick hatches. Three weeks later the fledgling leaves the nest.

Our female made a nest by herself out of coconut fibres, twigs and leaves in her enclosure in our rainforest hall. The pair is housed in a large aviary. The male was always very interested



in the nest and the female, but he destroyed the first eggs that were laid. To make sure that no more eggs of this rarely kept bird species would get destroyed, all the eggs laid by the female were transferred into an incubator. This way we could keep the eggs safe and rear 7 young birds successfully. Due to the fact that this species is so rare in zoological institutions it was very important for us to rear offspring, and unfortunately, artificial incubation was the best way to do this.

The next egg that our female laid was thus transferred to an incubator. The egg was exchanged with a dummy egg, so the female could continue incubation. Meanwhile the real egg was incubated at 37.4 °C and a humidity of 55 % until it hatched. Candling the egg after approximately one week can quickly reveal if the egg is fertile or not. This procedure was used on all the eggs that were laid. After hatching all the chicks are transferred into the care of the hand rearing keepers, the vet and the biologist at Weltvogelpark. They are placed into a steel bowl, padded with paper towels, an anti-slide-mat, coconut fibres or wood wool and housed in a closed and heated brooder.

On the first day, when the yolk sac is still being digested, a chick is only provided with a



*Chick at 3 days old*

mixture of water and a Ringer-lactate-solution. After approximately 35 hours the feeding starts, beginning at half past 5 in the morning until 11pm. In total the chick is fed 9 – 10 times per day – every two hours, which keeps the keepers very busy. In the beginning in Weltvogelpark the food consisted of the innards of one-day old mice enriched with lactobacilli to support and stimulate digestion. On the 5th day the food is further enriched with more vitamins and small portions of low-iron pellets, which are especially designed for fruit eaters and contain a high amount of protein. From day 9 onwards, peeled blueberries are fed as well.



The one-day old mice are now fed as a mash. Around the 15th day of age the food is expanded with T20 NutriBird Pellets for fruit eaters from Versele Laga: rich in proteins, vitamins and minerals. At this point the eyes of the chicks are already open and the young are very attentive. Shortly afterwards the feathers break open and soon the nestling are entirely feathered. In the whole growth period the temperature in the brooder has to match the needs and the growth of the chick. Starting at 37.2 °C the temperature is slowly reduced and always adjusted to the temperature of the young. By day 14 the temperature has been lowered to 35°C. In contrast to the temperature, the weight of the chick is of course rising – tiny in the beginning; the chick weighs 21.5g by day 6, 51g by day 11 and on the 13th day of age it weighs 63g. Shortly before fledging the weight has risen to 108g. On the 25th day the young Twelve-wired Birds-of-paradise leave the nest, now approximately weighing 119g. The artificial nest is placed in a rearing box a few days earlier so that the young can become accustomed to the surroundings. The box is only



*Chick at 16 days old*



*Chick at 25 days old after fledging*

heated by an infrared lamp and is furnished with natural branches and twigs. During the night, it is placed back into the heated brooder until it fledges. Soon after fledging the chick is very active. It preens itself and observes its surroundings. At this stage the young bird needs much more energy than before and thus the amount of food has to be increased and fed to the young with tweezers every hour. Additionally, a plate with a mixture of different fruits and T20 pellets from Versele-Laga is placed into the box so the fledged young get to know the food. From about the 30th day the young can be seen more and more often at the food plate until it actively feeds by itself. In this phase the keepers still provide additional food for the young bird with the familiar tweezers. The food is further enriched with small pieces of ripe mango and papaya. The amount of fruit and fruit pellets are increased, and at the same time the amount of meat is reduced. From day 40 onwards, the now nearly fully grown bird is transferred into a large aviary, furnished with a variety of natural branches and twigs. It is now self-feeding from the food plate and very interested in the water bowl, taking a daily bath. The new surroundings are being actively explored. The room temperature is around 23°C and the young bird doesn't need an additional heat lamp. All the juveniles are coloured like females in the beginning so they have mostly brownish plumage. Even if the young bird is actually a male, the typical colouration of the plumes is not completed before the age of 5 years. Weltvogelpark Walsrode is very proud to have successfully reared Twelve-wired Birds-of-paradise. But of course we didn't want to wait for five years until the young birds actually show their sex by revealing their adult plumage. Therefore all the young birds were given a DNA test using a feather sample. As it turns out, we





*At 2 months of age in an aviary*

have been very lucky with our chicks – 4 males and 3 females! We are now looking forward to seeing the young birds grow up and to care for them until they are sexually mature at the age of 4 to 6 years.

Hand-rearing Team: Veterinarian Andreas Frei, Biologist Jan Dams, Animal Keepers Wolfgang Magnus, Janina Gerbatsch, Sina Eggers and Kim-Jana Lang.

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## BREEDING EXPERIENCES WITH NEW GUINEA BRONZEWING *Henicophaps albifrons*

By Seth Martens

Keeping nothing but doves is rare in the world of aviculture. Somehow pigeons and doves don't receive the attention they actually deserve. Some, mostly the more beautifully coloured species, are kept in mixed collections, often without any real efforts to breed them. Others are often considered as colourless and boring. Therefore many dove species don't have sustainable populations in aviculture.

Breeding doves is not really that simple. Some species are successful and have, in relation with their biological behaviour, a fast reproductive rate. Nevertheless it is hard to maintain this success in our aviaries because of the many other important characteristics of their behaviour.

Other species have very slow reproductive rates, and these species are very sensitive to the conditions around them which have to be ideal before they even start thinking about breeding.

For us that is what makes doves an interesting family to focus upon. It is a very diverse family that has dull species with a colourful character and sound, also beautiful stubborn species which require a breeder to use all their creativity to be successful.

One of the best examples of difficult species might be the New Guinea Bronzewing *Henicophaps albifrons*. At the end of the 1980s and the beginning of the 1990s there were a few importations of this species together with other beautiful species from New Guinea.

At first sight it is a strange bird with a long beak and dark colour, but in the sun you can see its beauty as the bronze colours on the wing show up. At that time our aviaries were small and we didn't keep this species but 10 years later I had aviaries that were suitable, as well as a lot more experience in breeding doves, but the species seemed to have disappeared. I found out more about them and contacted breeders. Most talked about a very aggressive species which was impossible to keep with other doves and almost impossible to keep as a pair in an aviary. There were very few records of breeding results. I almost gave up hope of finding any, but at the end of 2004 I was told that a bird was for sale in a petshop. I immediately contacted them and there was a bird for sale that was brought in with some parrots. I thought it was a male since the forehead was totally white; females have a forehead that goes from white to grey and the top of the head is more brownish before going over to black again. The male also has more intense black with a purple sheen on the neck. The female's colour is less intense. The beak of the male is a little heavier than that of the female.



I kept this male bird in an aviary together with a pair of Chestnut-backed Thrushes *Geothlypis trichas*. The inside aviary measures 1.8 x 1.8 x 2.5m and the outside 2.0 x 6.0 x 2.2m. It spent most of the time hidden in the outside aviary. My aviaries were densely planted with bushes and grass. Some visitors disliked the fact that the birds were so difficult to see, but it is preferable to offer them a natural habitat. It did very well on a good mix of seeds, mealworms and some fruit; he also took some of the pellets provided for the thrushes. In winter the bird was kept away from freezing temperatures, although I now know that this isn't necessary.

I contacted Pierre Wardenier who used to breed this species and he gave me some very good advice about their treatment. It was Pierre who told me to give them some nuts which they really love. Although it has the posture of a bird of some size, it is rather thin and they appreciate rich food. At first peanuts were offered but the risk of fungus made us decide to give walnuts instead. We are not really sure if the risk of fungus is any less, but the joy they have with walnuts is incredible to observe. He took the walnut to the outside aviary and hit it against the ground or on some stones to get the kernel out. I made the hole as small as possible but he always managed to open it.

Since Pierre didn't have any breeding success for some years he decided to lend me his last offspring which was a female. I was incredibly happy to get this opportunity, but also nervous of the responsibility! This was at the end of 2005. The female was placed in the aviary next to the male. Nothing happened. The male didn't call; there was no reaction at all! After a few weeks the door between the enclosures was opened and the birds could get together. An exciting moment, but no reaction. They did sit in the same aviary but there was no interaction at all! After some weeks the door in between was closed and they were kept together in one aviary. The season passed and nothing changed. The thrushes bred and the bronzeings seemed to get on well.

I met Pierre at the autumn meeting in 2006 of the Wild Doves Study Group, he told me he unfortunately lost his female and I could have his old breeding male. He thought it was best to change the male since it was a good breeding bird and there was no interaction in the pair I had. I took out my male bird and placed him in in an aviary out of sight. The old male was placed in the aviary with the female because I wanted her to be dominant. Immediately there was more interaction, but it wasn't love at first sight. The female was indeed dominant, but she didn't attack the male so they were given time to get used to each other.

The female was clearly dominant but I could see the birds together in the inside aviary and there was no real aggression. Nevertheless food and water were given outside and inside as is normal for more aggressive dove species. Again the season passed without any changes. The winter passed and hope was raised for the new season. In March something happened that had been predicted by many. I found the male heavily injured in the outside aviary hidden under some herbs. He was stitched and kept in quarantine for some days and fortunately he survived. It was impossible to put this pair together again so I tried the first male. The same strategy was used and after a few weeks the pair was together again. Pierre told me he bred this species late in the season, mostly starting in July, so I still hoped that it might be possible.

Different types of nest boxes were given in the inside and outside flights. Deep boxes, open baskets, even small nests in the middle of some bushes. I noticed them using their strong beaks to search for roots and insects in the ground. The aviary was planted with herbs and I placed some dead tree trunks which they destroyed when looking for food, apart from the thrushes there were no breeding attempts in 2008, 2009 and 2010.

I gave up hope and almost considered placing the pair in a big communal aviary of 150m<sup>2</sup>. At the beginning of 2011 something changed. It was March when the pair started to carry twigs into the inside flight. It seemed to be without any real goal since all the branches were just dropped on the ground. But after a few days they were putting the branches on a perch and tried to put them into the aviary mesh to keep them in place. Since these birds seemed to need so much time and really hated disturbance I didn't want to help them. After some days they managed to make something that looked like a nest and one egg was laid but after three days it was found on the floor. The nest was very poor and I decided to help them. I placed a piece of black plastic wire under it and hoped they would not notice. Unfortunately they did and didn't return to the nest. It was early in the season so more attempts could be expected, but at the beginning of April there was a problem in the aviary, the Chestnut-backed Thrush had attacked the male bronzewing. The thrushes were immediately removed, although they had a nest at the time.

Shortly after, the bronzewings started to collect a lot of material to complete the nest they had used before. A lot of herbs and grasses were used and they built a very good nest. Two eggs were laid and they started sitting very well. They can be aggressive but were very peaceful now. Often the pair sat together on the nest. After 17 days an eggshell was found on the ground. Both parents stayed on the nest. More nuts and eggfood were added to their diet as well as some mealworms, but they were not taken. I did give some earthworms in a plate with the remains of the compost. They would throw the whole plate upside down but I am not sure how many worms were really eaten since a lot of them ended up dead around the plate. After one week the young bird could be seen, the head peeping out from under the mother. At last! There was one young bird, the second egg was found later and was infertile. After two weeks the youngster fledged and was ringed with a 7mm ring. When I caught the young bird the parents flapped over the ground as if they were injured. They were excellent parents and always beside the young bird. By the end of April it was eating well by itself and was taken out of the aviary. Surprisingly within the week the pair started again adding grass to the nest. Again two eggs were laid and this time they raised two offspring. Everything went very well. I was really happy with three offspring after so many years of trying. Maybe there is some hope of getting a population of this species in captivity.

After a pause the birds surprised us as they started again almost at the end of August. At that time the three young were surgically sexed and unfortunately turned out to be three males. Although there was some difference between them in appearance, in the first year it seems to be difficult to sex the birds visually. I hoped the next round would go well and produce a female. Two young birds were hatched but after three or four days one of them was hanging out of the nest and was dead, the other was reared.



I hoped the birds would now take a pause but they continued. The diet was reduced and only a simple seed mixture was given.

In fact they continued all over the winter time, 5 or 6 attempts failed because of infertile eggs or from disturbance when the door of the aviary was closed for some days because of the low temperatures. It took so many years before this pair started breeding so I really was afraid that separating them would be the end of this breeding pair. Artificially incubating the eggs was an option for a species as rare as these. When the pair stopped incubating and went into the outside flight I could collect the eggs without disturbing them. The eggs were cold and I put them under barbary doves. None of the eggs I collected developed further. Taking the eggs from under the breeding female was never an option, the risk was too high. They might lose confidence or it would be possible the female would lay again in too short a time and exhaust herself even more. To stop them, taking away the nest would be a possibility, but also this disturbance would be a risk. Finally in February they took a break. The last young bird was sexed and also turned out to be a male. Good breeding results but no progress for the future of this species.

At the end of March the pair started again. It was the first time I had seen them mating. The male had his tail spread open and kept his wings hanging down as he approached the female. She squatted on the branch and mating started. After a short mating the male coos and pushes his breast up while they start feeding each other. The call resembles that of the Wonga Pigeon *Leucosarcia melanoleuca* but is deeper and not so long. I had a pair of Wonga at the time and the idea crossed my mind that the call of the Wonga might stimulate the bronzewings to breed. I got the pair of Wonga not long before they started to breed.

This time they did breed well and a young bird was reared. It seemed that I had taken the right decision over the winter; nevertheless I started thinking what to do after this season. It would be an option to open the next aviary again and let them spend the winter next to each other, but they were raising a youngster again that had fledged. It would be the last unfortunately. After the young had fledged about a week, I found the female hidden in the outside aviary. The male had attacked her, she had lost a lot of feathers, was bleeding a little but her skin was not damaged too badly. I took out the male and placed him in the next aviary. The female reared the young. I would let the season pass like that and try to put the birds back together in the winter, when they were calmer.

At the same time I experienced aggression between the offspring. Even when young they can be very aggressive. A young male, in an aviary of 70m<sup>2</sup> killed a pair of Socorro Doves *Zenaida graysoni* and attacked a Metallic Pigeon *Columba vitiensis*. This happened in one day with no sign of aggression prior to that. A very young bird, shortly after being separated from the parents, killed a young Green-winged Dove *Chalcophaps indica* in the aviary with other young birds. It seems they are especially aggressive to birds with some fluorescent shine on them.

Just before the winter I opened the door between the aviaries to let the pair together again. This time the female attacked the male immediately. I let the male into the breeding aviary and

the female beside him and opened the door a few weeks later. They didn't attack each other but neither did they let one approach the other. A few days later I closed the door again. The birds were caught and placed in inside aviaries beside each other to pass the winter. I wanted to break the dominance that had occurred in the breeding aviary and placed them back together in spring.

The last two young were sexed and turned out to be females! Good news! More good news arrived thanks to Johannes Pfeidlerer. He spoke about these breeding results to Antonin Vaidl of Prague Zoo, Mr. Vaidl immediately decided to place his male bird on breeding loan. It is wonderful to have co-operation to maintain the specimens we have left in aviculture in Europe.

I lost the old breeding male that came from Pierre. Also a female with Mr. Ossenbruggen in Germany was known to be a killer so couldn't be used for breeding. I received one female from a breeder in Belgium. Unfortunately this bird didn't have any nails and was missing parts of her toes. But in fact 4 pairs were formed. Probably the last birds to be found were old birds but their genes were important.

The Prague male was placed beside the female from Belgium. One pair and a male were placed in Germany. Not expecting too much from young birds, the first year I decided to put them aside and see how the unrelated birds would do. If necessary they still could be paired. The male from Prague and his female were reacting to each other well and gave me some hope. In February they were placed together. It seemed to go well but finally I found the female dead. Again there was no sign of aggression beforehand. Attempts to put the breeding pair together again failed so another solution had to be found.

At the beginning of 2013 our family took the decision to move to France. We got the offer to build up a breeding centre with guest houses and meeting places. We hope to develop this place as a centre where the different aspects of the world of aviculture can meet: private breeders, zoological institutes, scientists and ecologists. We know the value of aviculture for social/cultural as well as for ecological reasons. It has an important role to play in the preservation of biodiversity through projects.

The location is wonderful and the possibilities huge. Here at Mas Aucèl we want to participate more in breeding projects and besides breeding the Socorro Dove, the bronzewing is an important species to start with. Aviaries were built and the birds were moved over here half way through 2013. At the moment the Prague male is paired with the breeding female and the breeding male is paired with his daughter. The third pair is still in Germany and is doing well. We hope to have results again and to continue with this wonderful species. We really hope to see an unrelated pair in Prague Zoo again and to thank them for the confidence given to us.



## RECORD BREEDING YEAR FOR RUSTY-FACED PARROTS *Hapalopsittaca amazonina* IN COLOMBIA

By Dr. David Waugh  
Director, Loro Parque Fundación

Native to Colombia and Venezuela, the Rusty-faced Parrot *Hapalopsittaca amazonina* is categorized in the IUCN Red List as ‘Vulnerable’, primarily due to the small size of its population and the loss and fragmentation of its natural habitat caused by the expansion of the agricultural frontier in the Andean forest;

We have a historical record of the Rusty-faced Parrots *Hapalopsittaca amazonina*, 6 active nests with up to 3 chicks between March and June. In late March the first occupation was recorded and the first chicks were recorded in early June. In May, a count of 79 individuals was undertaken in the usual monitoring site in the Colibrí del Sol Bird Reserve, they never had counted that number before.



*Rusty-faced Parrot Adult*

After three successful years with 4 nests being occupied between 2012 and 2013, in 2014, and after maintenance work, we doubled this figure with 6 occupied nests.

The maintenance tasks include changes in the shape of the nests and location, trying to find the right height. Changes were performed in the size and shape of the cavities that allow entry to the nest, and annual maintenance, where the sawdust inside is replaced at the end of the breeding season so that new pairs find them suitable.

For their protection, in 2005, ProAves created the Colibrí del Sol Bird Reserve, with the support of American Bird Conservancy.

The reserve is located on the western flank of the Western Cordillera in the geographic system Páramo de Frontino, in the municipality of Urrao, Antioquia. It was created to conserve the habitat of the Dusky Starfrontlet *Coligena orina* and other endemic birds in the Páramo del Sol area, it has an area of 1806 acres of forest and high Andean paramo, between 2400 and 3750 m.

This reproductive success is thanks to the initial support provided in 2008, by The Zoological Society For The Conservation Of Species And Populations (ZGAP) that allowed the preliminary study of the natural history of the species in Colombia and project continuity provided by Loro Parque Fundación and American Bird Conservancy.

The populations of Rusty-faced Parrot *Hapalopsittaca amazonina* have increased in recent years; this can be substantiated by the records of the monthly monitoring performed in Colibri del Sol Bird Reserve, reaching a historical record in May 2014 where a count of 79 individuals was confirmed in the usual monitoring site, never before have they recorded that number.

Photo – Fundación ProAves



## NEWS LORO PARQUE FUNDACION SEPTEMBER 2014

By Dr. Matthias Reinschmidt, Zoological Director, Loro Parque, Tenerife

Although the parrot's main breeding period is slowly coming to an end, until all the young are reared and have become independent, some months have to pass. In particular, we are very happy about one young Palm Cockatoo *Probosciger aterrimus* that is now three weeks old and is being lovingly cared for by our keepers in the rearing house.

In the breeding station of Loro Parque Fundación "La Vera" two Thick-billed Parrots *Rhynchopsitta pachyrhyncha* have hatched and are being cared for by their parents. Attempts in previous years with this parrot species, by transferring the eggs to the incubator 10 days after hatching in order to stimulate the female to lay a new clutch, failed. Although the young were hand-reared successfully, the female did not lay eggs again until the following year. Thus, this management strategy with this parrot species makes no sense. Therefore, since then we have tried to have natural rearing of Thick-billed Parrots and only intervene if help is needed, if for



*A Lear's Macaw flock in Canudos*

example the parents neglect the young. This year, the young animals have prospered splendidly so far and we hope that this continues.

From the species of the genus *Brotogeris*, the Plain Parakeets *Brotogeris tirica* are currently rearing four chicks. Although you can still hear regularly from breeders about second breedings

with this parrot species, the fact is that the number of these parakeets in captivity is declining compared with the past.

After a long breeding break, once again a Short-tailed Parrot *Graydidascalus brachyurus* has hatched in the breeding station of LPF. In a larger group aviary two pairs of this species are held, of which only one pair moved to a nest-box and has started breeding. Now, begging sounds emanate from the nest-box, which is a clear indication of at least one young. The female does not want to leave the nest box and we do not want to disturb her, so we still need to be patient until we can see the young for the first time.

In Jeremoabo, Brazil in mid-August the meeting of participants in the breeding programme of the Lear's Macaw *Anodoryhynchus leari* took place, organized by the Chico Mendes Institute for Conservation of Biodiversity (Instituto Chico Mendes de Conservación de la Biodiversidad ICMBio) of the Brazilian Government. 20 experts from around the world participated, including our curator Dr. Juan Cornejo, who is management advisor to the breeding programme and coordinator of the International studbook for the Lear's macaw.

During four days of intensive work, Juan presented the management protocols for managing the Lear's Macaw in captivity, as well as presenting the updated studbook. He also worked on a plan for international exchange of macaws to provide new pairs for reproduction especially in the Brazilian facilities. On the last day of the meeting there was the possibility of visiting the largest breeding colony of the Lear's macaw near the city of Canudos, where the Lear's macaw can be observed very well. Currently, there are 109 living Lear's macaws registered in the international studbook, living in six different countries and distributed across 12 institutions.

The Loro Parque Fundación received two pairs of Lear's Macaw from Brazil in 2006, and by intensive efforts it was possible to breed to date 30 young from these two pairs. As such, the Loro Parque Fundación has the world-leading role in the conservation ex-situ of this endangered parrot species.

Image: from Dr. Juan Cornejo



## SOCIETY TRIP TO BARCELONA, NOVEMBER 2013

By Martin Greene

Seventeen members of the society met at Bristol airport for the flight to Barcelona, with two more flying from Gatwick and Simon Matthews joining us later from Qatar. We stayed in a comfortable hotel near the coast and a little way from the city centre. Several members took the opportunity of visiting the centre during the first afternoon after we had visited the aquarium which is the largest Mediterranean-themed aquarium in the world. It contained an impressive collection and a walk through the acrylic tunnel that runs the length of the Oceanarium was quite an experience.

On the second day we visited Cim d'Aligues centre (Eagle's Peak), which entailed a 45 kilometre trip into the hills. The centre was created for the study, breeding, exhibition and the free-flight of birds of prey. It has a dramatic location on a cliff edge and is aptly named. There are 100 birds of 28 different species at the centre, organised in two different zones: the exhibition area and the breeding area.

We had a conducted tour by the owner Lurdes Arimont who was extremely helpful and spoke excellent English. I was particularly impressed by the free flying displays, different raptors being flown in each display. The morning show ended with 22 Black Kites *Milvus migrans* being released from their aviary and they circled over the valley, with most returning to be placed back in the enclosure; however some were not so co-operative and took some time to return. A Secretary Bird, after dealing with a plastic snake, jumped onto the falconer's fist! The centre has enjoyed regular breeding success with Secretary Birds *Sagittarius serpentarius*, the resident pair having reared seven young, also Chilean Eagles *Geranoaetus melanoleucus*.

Our tour included the well-equipped veterinary facilities and off-show 'seclusion' breeding aviaries. Among other species, these housed several fine pairs of Eleonora's Falcon *Falco eleonorae*. The slopes of the promontory on which the centre sits were developed as a nature reserve.

The next day we visited Psittacus Catalonia SL. The company was founded in 1998 with the development of the African Grey *Psittacus erithacus* breeding centre, since then the company has diversified and now has several objectives:

- The captive breeding of African Grey Parrots.
- The development of diets for feeding and rearing of psittacines and other species.
- Carrying out research.
- The publication of articles on the breeding and care of parrots.



*Lurdes Arimont*

We had a very interesting tour of the factory. This is a modern facility where maintenance, breeding and hand-rearing diets for an increasing range of species, including substitute crop milk for pigeons, are formulated with great precision, after testing on birds kept here and in other collections. We also visited the rearing centre and saw the babies in different stages of growth, from partly feathered up to independence in an aviary. A great deal of time and expertise is used to produce a confident and well-reared youngster. We were made very welcome, with translators drafted in and a chance to meet local aviculturists, and talks arranged on rearing methods and the behavioural research which underpins them. We were happy to accept free samples of diets to try with our own birds.

On the final day we visited Barcelona Zoo having a tour from the curator of birds Miquel Sierra i Bragulat. It was founded in 1892 and is home to 2,200 individuals from over 315 species in 13.5 hectares.

The bird collection is extensive, with a well-stocked bird house and enclosures around the zoo. We arrived early and were taken into the kitchen to see the morning feed which had been prepared for the wide range of species kept. We next visited the bird house, which contains a number of mainly mixed species in glass-fronted exhibits. Species here included turacos, barbets, fruit doves, pheasant pigeons and many others, as well as wetland birds such as small herons and egrets, and the breeding Lesser Jaçanas *Microparra capensis* featured in a recent *Avicultural Magazine*.

There is also a bird garden area with a range of tall aviaries for parrots and other birds. The zoo houses two flocks of flamingos, pelicans, penguins, ibis, Hammerkops *Scopus umbretta*



and breeding Ground Hornbills among many other species. We were taken into an off-show building housing mainly confiscated parrots, most of which the zoo is required to keep on site because of legal restrictions on their movement. Here were also surplus birds bred in the zoo awaiting new homes, and birds taken off exhibit pending renovation of their enclosures. These included Green Jays *Cyanocorax yncas*, whose breeding at the zoo has also been the subject of an article in the Avicultural Magazine.

We also saw impressive new aviaries for Lammergeier *Cypaetus barbatus* and Black Vulture *Coragyps atratus*, and a range of aviaries for breeding Lesser Grey Shrikes *Lanius minor* as part of a regional conservation programme.

As would be expected with a long-established city zoo, a programme of renovation and replacement of older enclosures was on-going, with birds faring better than they might in many zoos through this process. This was a first visit for everyone in the party, and all were pleasantly surprised by the number and range of bird species on show and breeding.

Birdwatching opportunities were not difficult to find, with Mediterranean staples such as Black Redstarts *Phoenicurus ochruros* easy to see in the streets, squares and parks near the hotel, along with Crested Tits *Lophophanes cristatus* and wintering Blackcaps *Sylvia atricapilla* among other species. Feral parrots are also a feature of the city's avifauna. Quaker Parrakeets *Myiopsitta monachus* are the most numerous, with one colony inhabiting a large nest in a palm tree yards from the hotel. We also had good views of a group of Blue-crowned Conures *Thectocercus acuticaudatus* feeding in a roadside tree alongside the coach while we were stopped at a traffic light, and Ringnecked Parrakeets were numerous around the zoo, where a Senegal Parrot *Poicephalus senegalus* was also spotted.

The city has many other attractions, historical, architectural and cultural, ranging from Roman ruins through the cathedral and Gaudi's spectacular Sagrada Familia church to the famous football stadium.

Many thanks to Mike and Norma Curzon for organising another very successful trip.

## BOOK REVIEW

### PARROTS OF AFRICA, MADAGASCAR AND THE MASCARENE ISLANDS

By Rosemary Low

Little was known about the biology and ecology of African parrots until Professor Mike Perrin and his colleagues at the University of KwaZulu-Natal set up the Research Centre for African Parrot Conservation. Mike has been the director for more than a decade. When I first met him in 1996 he told me that he was determined to initiate studies of parrots because the scientific focus in Africa had been mainly on the larger mammals; parrots were a neglected group. He had studied at the University of London and did his PhD at Exeter University but most of his working life has been spent in Africa.

His postgraduate students amassed a wealth of information, largely in the field, in various parts of southern Africa. The result is an extraordinarily detailed book (long awaited) of 612 pages (large format): *Parrots of Africa, Madagascar and the Mascarene Islands: Biology, Ecology and Conservation*. This is a heavy tome (about 3kg in weight) -- there is no equivalent relating to parrots of other continents.

A massive amount of information is contained within this work, concerning all aspects of the biology of African, Malagasy and Mascarene parrots, and existing knowledge of extinct and fossil parrots. Particular themes include the behavioural, ecological and species characteristics of parrots.

Chapter 2, entitled *Conservation Biology*, states that Africa has 175 million hectares of tropical rainforest -- but African forests are being destroyed at a rate of approximately 228 hectares per hour or 2 million hectares per year. Mike Perrin writes: "... opportunities to raise awareness of the plight of African species among wildlife managers, legislators, researchers, birdwatchers and the public must be grasped at every opportunity."

This book brings sharply into focus the most crucial problems: deforestation and the poaching of young parrots from nests and capture of adult birds. Where legislation exists to protect wild-caught parrots from trade, lack of enforcement is a problem. "This issue must be resolved before many of Africa's parrots can be considered truly safe from extinction."

Note that CITES data showed that during a 15-year period, 500,000 Grey Parrots were documented in international trade. This figure approached the 1993 estimate of the wild population of only about 600,000 birds.

A remarkable wealth of information is found in the section *The Parrot Species of Africa* (pages 308-516). Details are provided under the headings of Description, Distribution, Conservation Status, Movements, Habitat, Habits, Vocalisations, Diet, Breeding and Taxonomic notes. Breeders will find photographs of sub-species (Meyer's, Jardine's) very useful for correct



identification.

Lovebird breeders will learn a lot about the wild life of these birds. For example, Red-faced Lovebirds *Agapornis pullarius* feed mainly on tall grasses, including cultivated millet, also sorghum. The seeds are eaten while climbing along the grass stalks. The species account for the Peach-faced Lovebirds *Agapornis roseicollis* extends over 16 pages. It is selective in its diet, moving up to 3km from the nest site to feed on the seeds of wool grass *Anthephora schinzii*.

The 42-page bibliography and the 17-page (small type) index gives an indication of the research, detail and thorough coverage of this work.

Published by Wits University Press, the price in the UK is approximately £60. This is not expensive considering the quality of the production, the enormous number of interesting colour photographs and that this will surely be the definitive work on the subject for decades to come. No one with an interest in the parrots of Africa should be without this ground-breaking book. Mike Perrin and his colleagues can be immensely proud of their work and collaboration.

## THE VALUE OF RECORD KEEPING

By Louise Peat

We are all very devoted to the day to day husbandry of the individuals in our care, sometimes there are just not enough hours in the day to fit it all in. Little wonder then the idea of having to spend precious time keeping tedious records is never going to feature high on the priority list!

But there are many genuinely valid reasons why responsible aviculturists should invest a little time maintaining some degree of records of the birds in their care, and once you start, you may be quite surprised at how obsessed you can become over those prized notes.

A decade or so ago as a bird keeper at Cotswold Wildlife Park, I was responsible for a row of 12 aviaries, with various amazing species, including the magnificent Capercaillie *Tetrao urogallus*! My memory has never been particularly sharp I struggle to recall what I did last week, let alone last year and when pressed for information a long wait is required whilst watching my rather pained yet pensive facial expressions! As well as keeping the required official records for the animals in my care I also kept my own personal records, including ages, personalities and breeding information. These proved a godsend whenever reviewing how the breeding season had gone, the information could then be utilized to plan ahead and implement changes for the following season to try to improve success rate.

As part of my current role at Cotswold Wildlife Park as Registrar, I maintain the record keeping system which contains information (both past and present) for close to 20,000 individual animals. Having a good record keeping system in place is a requirement of the zoo licence, but also imperative to track husbandry, health, breeding and pedigree information that can help zoos with the management of the species in their care.



*Painting courtesy of Dave Brunger*

Many zoos around the world use a system known as ZIMS or Zoological Information Management System to maintain their records. Since its launch a few years ago it has



advanced zoo records considerably. Among other uses the system allows users to compare the relationship between prospective animals from other collections to help ensure that genetic diversity is maintained within captive populations, an essential tool towards the longevity of our populations.

As amazing as ZIMS is I doubt it is of immense significance to the private aviculturist with a handful of birds, so I will avoid going into detail on the subject of how wonderful ZIMS is and rather point out that by keeping just the most basic of information, private aviculturists may be surprised at how useful a tool it can be and ultimately beneficial to the private aviculturist and the longevity of our captive avian populations.

So what kind of records and information should we be keeping? For the very basics, the gender, date or year of birth, where you got the bird from and when known who bred the bird, along with any identification, leg rings or microchips.

Just this very limited information, will ensure you know when your birds are of breeding age, when they are perhaps getting past it and enable you to track the origin of your birds.

Of course, once you have succumbed to the thrilling world of information compilation, you will start to understand how simple it would be to add a summary of the birds breeding at the end of each season. This can be done with a simple annual sentence that summarises the success or failure of the bird that year, perhaps followed up with a plan for any changes to implement for the following season. Trust me when I say this can become quite obsessive!

It is also important for the responsible aviculturist to track any health issues or medical treatments; this can help spot any danger signs or patterns that may well make breeding failures more explicable. Being aware of your mortality rates may draw your attention to potential husbandry problems or even disease issues in your collection.

Finally, when exchanging birds with other aviculturists being able to pass on all the information you have compiled about an individual will not only make you look like a true professional but also arm them with a much better knowledge of the individual they are receiving.

The key to any record keeping is in being organised but not overstretching yourself, keep concise and consistent information, update your records regularly and set yourself a ten minute time slot each week, or half an hour each month to ensure you keep everything up to date. You can either keep record cards as a hard copy that you add information to by hand kept in a file, or rather than having reams of paper lying around consider opening a record file on your computer.

To help you all get started (I can just see you all itching to do so) you can find sample record cards on the Avicultural Society website, available as an excel spreadsheet or as a word document. Do feel free to use these or adapt them to suit your own purposes.

The most important thing to remember is that record keeping does not have to be a tedious

ID number: RCT 2		Mr A. V. Culture	
Taxonomic Name:	Tauraco erythrolophus	Family:	Musophagidae
Common Name:	Red Crested Touraco	Order:	Cuculiformes
Information			
Sex:	Male	Sire ID:	Leg ring RED 37 at Mr An Gola
Birth Type:	Captive born	Dam ID:	Leg ring GREEN 28 at Mr An Gola
Birth Date:	31rd May 2010	Hybrid:	Not a hybrid

Date In	Acquisition - Vendor / ID	Holder	Disposition - Recipient / ID	Date Out
01/10/2011	Mr An Gola - RED5	A.V. Culture		

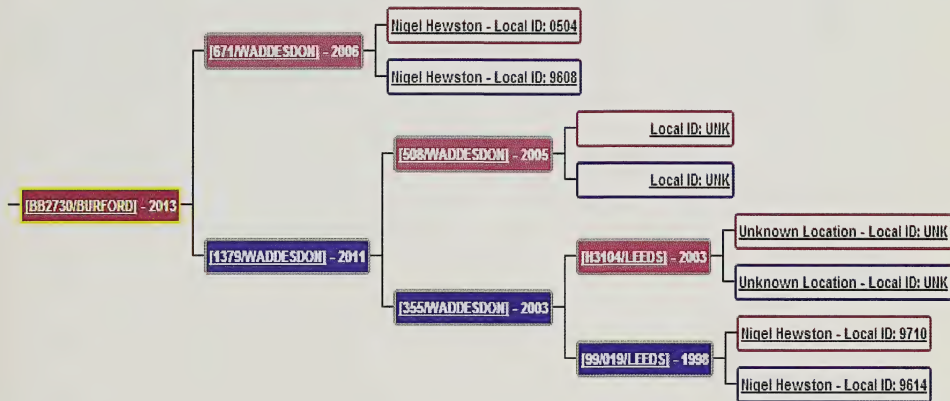
Date	Note type	Comments
01/10/2011	Arrival	Purchased from Mr An Gola to pair with female RCT1 - young bird no previous breeding behaviour, or health problems. Sire & Dam of this bird originate from the continent.
05/10/2011	Introduction	Male RCT2 introduced to female RCT1 - No aggressive behaviour.
01/03/2012	De-worming	Routine treatment with De-wormer
01/06/2013	Eggs	Female has laid a clutch of 2 eggs - male taking
28/06/2013	Chicks	Chicks observed in nest.
28/07/2013	Fledged	One chick fledged - nest now empty.

Date	Sex	Identification
	Male	Leg Band 1010PPHCP Red Left leg.



chore; there is a very real value in being able to track the origins of your birds to help sustain the longevity of our captive populations both in the zoo world and with private aviculturists, and you can play a part in that.

There are several bird species managed in zoos today at studbook level that would not have thrived had it not been for private aviculturists, a good example of this is the Mount Omei Babbler *Liocichla omeiensis*. Below is the family tree or pedigree of a female in our collection, as you can clearly see this individual can be traced back to private individuals.



Of course many private keepers already keep very good records, the best maintained records I have come across from a private individual are from Nigel Hewston. Over the years he has kept detailed information about all of the birds in his care, which no doubt made Nigel's duties as the European Studbook holder for this species much easier.

If all private aviculturists could be inspired to keep records at the same level, this could have the potential to make a very real contribution to the future sustainability of our captive populations.

Food for thought.

I am both flattered and embarrassed to be singled out for praise by Louise, but it does at least give me the opportunity to encourage you to follow her advice. I have always kept written records about birds in my collection, and still have my first record books started at the age of 12. I would like to reiterate not only Louise's statements on the importance of record keeping, but also her advice to keep it simple – if it's not easy, you are unlikely to sustain it. We don't all have access to or need ZIMS, but it's not difficult to keep records which are just as useful. The form I eventually designed for my own use (photocopied and filled in by hand) recorded basically the same information as Louise's example, ie unique ID number, source & parentage, rings, dates in & out, then notes on moves (have a code or name for each of your enclosures), mates and health. Matched with an annual breeding record form for each pair, and a simple list for all your stock with a one-line record of ID, date in with source (including home-bred) and date out with destination (or death), this will give you all the information you need to keep track of your collection. If you can't manage all this, just keep the list.

I would also echo Louise's advice to pass information on when your birds go to other collections. This is important to you as well as the new owner – if more breeders did this we would know that those unrelated birds we are so glad to find really are unrelated – not the same old bloodlines going anonymously round in circles! For the same reason don't throw records away when birds die – keep an archive, it may prove to be useful.

If you have your own record forms that you think could be useful to others we can put them on the website with Louise's, and if you have ideas or experiences to share on record keeping, send them to Dave Coles for inclusion in News & Views.

**Nigel Hewston**



## AUTUMN MEETING AT BEALE PARK

By Ray Piper

The society held its autumn meeting on Saturday, 13th September at Beale Park on the banks of the River Thames at Pangbourne.

Dave Coles, the long serving curator at Beale Park, laid on a very enjoyable day, with council members meeting in the spacious education centre, whilst other members enjoyed a leisurely stroll around the aviaries and enclosures containing the vast assortment of birds and animals.

Dave Coles and the park staff provided an excellent buffet lunch for all those attending. This enabled members to get together and discuss breedings and general bird matters. These “get togethers” are always interesting and enjoyable, reflecting one of the benefits of belonging to the Society.

After lunch, Dave and his assistant Andy Nichols took members on a tour of the park. As might be expected, with the park being situated on the banks of the Thames, many enclosures are constructed around water and members were shown areas which had been submerged for several weeks during the extraordinary floods experienced earlier in the year. Some reconstruction is underway and new enclosures are being established, including a new rearing room and indoor quarters for Capybaras *Hydrochoerus hydrochaeris*.

Members were shown this year's breeding successes including Striated Caracaras *Phalacrocorax australis* which are now almost identical to their parents. The park also has first class owl aviaries, containing Chacos *Strix chacoensis*, Great Greys *Strix nebulosa*, Hawk *Surnia ulula* and Snowy Owls *Bubo scandiacus*.

A very large well planted aviary contained many varieties including a very tame Crowned Crane *Balearica pavonina*, which took a particular liking to our chairman Nigel Hewston!! This aviary also contained rare Bali Starlings *Leucopsar rothschildi*, Luzon Bleeding Heart Pigeons *Gallicolumba luzonica*, Red-crested Touracos *Tauraco erythrophus*, Spreo Starlings *Lamprotornis superbus*, Dwarf Red Turtle Doves *Streptopelia tranquebarica*, Speckled Pigeons *Columba guinea* and Grey Peacock Pheasants *Polyplectron bicalcaratum*.

Another aviary contained one of the finest pairs of Blue and Gold Macaws *Ara ararauna*. I have seen, as well as a colony of Jendaya Conures *Aratinga jandaya* which were breeding well.

Mammal enclosures contained Marmoset, Tamarin Monkeys, Ring-tailed Lemurs *Lemur catta* and Capybara *Hydrochoerus hydrochaeris*. Larger mammals included Reindeer and Dwarf Zebu.

The grounds at Beale Park also contain some fine statues and wonderful exotic plants, displayed amongst the lakes and water features. All of which helped make our day a very pleasurable experience.



*Beale Park*

## RAYMOND SAWYER SCHOLARSHIP

The first Raymond Sawyer Scholarship has been awarded to Heiko Janatzek. Heiko is a trainee special needs teacher in Germany, who also works at Cologne Zoo and was one of our guides when the society visited in 2011. As well as his work in the zoo education department, he is also heavily involved with the bird collection, and has completed placements at Frankfurt Zoo and Loro Parque. He is an Aviornis Germany committee member, and also keeps and breeds birds at home including crakes and quail. He is planning to move to Plymouth next year to study Zoo Conservation Biology. He is a young man determined to build a career in aviculture and bird conservation, and as such an ideal candidate for our inaugural scholarship. He narrowly beat a small field of other strong candidates, all of whom I am sure we will hear more of in years to come.

The scholarship is designed to encourage and support young aviculturists, and will be awarded annually to a birdkeeper - amateur, professional or student - under 25 years of age. It covers course fees and accommodation at one of the excellent avian courses run at the world-renowned Durrell Conservation Academy attached to Jersey Zoo. Heiko will participate in the Avian Egg Incubation Workshop in November 2014, an intensive five-day course led by Susie Kasielke of Los Angeles Zoo; next year's scholar will attend the Conservation Breeding and Husbandry of Birds course in autumn 2015.

We look forward to reading about Heiko's experiences on the course, and please spread the word about next year's scholarship – applications will open in spring 2015.



# BREEDING THE STRAW-TAILED WHYDAH *Vidua fischeri* UNDER ITS USUAL HOST SPECIES, THE PURPLE GRENADIER *Uraeginthus ianthinogaster*

By F C Barnicoat

For several years Neil Chilton-Jones has been breeding African waxbills with considerable success in outdoor aviaries in the well wooded grounds of his large property at Klip River about 40km south of Johannesburg.

Among the reasons for the good results he obtains with this group of birds is his close proximity to an abundance of termite mounds and he has overcome the various problems associated with the feeding of termites to his waxbills on a daily basis. The termites are fed in wooden feeders commonly sold for attracting wild birds into gardens. The steeply sloping roofs over these trays protect the termites from sun and rain. These bird feeders can be suspended in the aviaries and the termites are put into plastic drinking bowls generally used for dogs. Black ants, so often a scourge in this country where termites are fed continuously, can be kept at bay by filling the rim around the base of these bowls with water.

Another reason for the consistently good results is the housing of the waxbills mainly as single pairs to a small aviary only 0.6 metres wide x 2.4 metres long x 1.8 metres high, so that there cannot be any disturbance whatsoever when the pair is nesting. All the aviaries are planted with natural grasses and the various types of millet. Furnishing the aviaries with thorn tree (acacia) branches is thought to provide a stimulus to breed with this group of birds. With these aviary conditions breeding results with Orange-breasted *Amandava subflava*, Cordon Bleu *Uraeginthus bengalus* and Blue-capped Waxbills *Uraeginthus cyanocephala* as well as Firefinches have been impressive.

The challenge to succeed with the Straw-tailed Whydah was attempted in a larger aviary 3.6 metres square with the height increased to 3.3 metres to provide open space for the male whydah to perform his spectacular mating display resembling some exotic firework above all the vegetation provided for nesting sites. For 2014 this aviary was allocated to single pairs of Straw-tailed Whydahs, Purple Grenadiers, Peter's Twinspots *Hypargos niveoguttatus* and Blue-capped and Black-cheeked Waxbills *Estrilda chamosyna*. An odd male Schlegel's Twinspot *Mandingoa nitidula schlegeli* was also left in this aviary, but it was by no means overcrowded.

The Purple Grenadiers built a globular grass nest in a dry Acacia branch 1.2 metres above the ground, but lost their first round of babies when they were quite well grown, but prior to them leaving the nest. In July 2014 it became apparent that they were feeding babies again in their same nest, the assumption being that they were baby Purple Grenadiers. It was only after two babies had left the nest it was noticed that they did not have blue rumps and were too dark in brown tone and too heavily streaked on the back to be the offspring of the parents feeding them. At the time of my visit at the beginning of September it was obvious there were two young Straw-tailed Whydahs flying about vigorously in the aviary. They tended to perch on

high and exposed branches and were steady subjects to photograph. Their sex could not yet be determined.

This breeding is a first for South African aviculture and has won widespread respect. Another focus of interest in this aviary was the nest built by the Black-cheeked Waxbills right at the top of a thorn tree branch. Black-cheeked Waxbills are recorded as nesting high up in thorn trees in the wild, so best wishes are extended to Neil Chilton-Jones for achieving another challenging breeding success.

*Mike Curzon MBE found the following price list and thought it would be of interest to members.*

## THE FEDERATION OF ZOOLOGICAL GARDENS OF GT. BRITAIN AND IRELAND

FROM: Gerry Kirkham (Nairobi) (a member of the Avicultural Society)

To: Donald Risdon (The Tropical Bird Gardens, Rode)

The following birds are offered for sale, all prices f. o. b. Nairobi.

1 Bateleur eagle	£35	
2 Woodford's wood owls	£15 each	
Casqued hornbills	£40 each	
Sunbirds: Taccaze	♂ £10 each,	♀ £5 each
Malachite	♂ £10 each,	♀ £5 each
Green-winged	♂ £10 each,	♀ £5 each
Tinker birds	£5 each	
Red-naped widow birds	£5 each	
Jackson's whydahs	£6 each	
Delamere's whydahs	£6 each	
Golden-breasted (Royal) starlings	£45 pair	

20th January, 1970.

It is interesting that, while the list includes species such as Bateleur and Woodford's Owl which can still be found in collections, those which were probably most widely kept are the Taccaze and Malachite Sunbirds, which I suspect would now be hard to find in Europe. Probably the species on this list with the currently best-established captive population is the Royal Starling, which was, judging from the price quoted, not commonly imported even then, or was at least understandably sought after then as now.

I think I can remember seeing Giant Whydahs at Rode, and I wonder whether these were the Delamere's Whydahs listed. It is interesting that these, and Jackson's Whydah which I can't remember ever seeing in captivity, seem relatively inexpensive, though on reflection this is presumably a list from a small-scale, specialist exporter, and other species subject to mass capture and export at the time would have been even cheaper.



## MANAGEMENT OF THE SOUTHERN BALD IBIS *Geronticus calvus* AT EXMOOR ZOO

By Derek Gibson

Exmoor Zoo acquired two pairs of Southern Bald Ibis in early April 2013 which were six years of age. Upon completion of an off display quarantine period, the birds were placed on display to the public in an aviary that is about six metres high, eleven metres in length and seven metres wide. The enclosure has a simple glass frontage to allow the zoo's visitors a good chance to photograph the birds without the wire ruining the shot. It has a half covered roof with the back and sides partially protected from the, at times, rather inclement North Devon weather. This enclosure has a small shallow stream running through it, an area of pea shingle plus an area of grass. The aviary is planted with *Carex* grass *Carex species*, Tasmanian tree fern *Dicksonia antarctica* and Willow *Salix species*. The aviary is furnished with natural perches typically obtained from Beech trees *Fagus sylvatica*.

All the birds have different areas within the enclosure where their food trays are placed. The Ibis also have down pipes that have been dug into the ground, approximately 8 inches deep by 4 inches wide. These have food placed in them, which allow the birds a chance to probe and to be far more animated than if they just fed from an open food tray.

The Ibis share their aviary with 2 pairs of Laysan Teal *Anas laysanensis* and a pair of White-cheeked Turaco *Tauraco leucotis*. The birds appear to mix well with little or no interference, apart from the Ibis stealing various pieces of fruit from the bowl given to the Turaco and also bread from the Teal food bowl. Each species has its own nest sites, the Turaco have hanging baskets "hidden" in the foliage of the aviary to offer protection from the occasional probing Ibis beak; the Laysan Teal have nest boxes that are positioned in the stream which the ducks also have access to. The entrance is a hole into a small compartment from where they can enter a larger compartment to lay their eggs. This enables them to keep them out of "beak's reach" of the Ibis. The Ibis themselves have three nest box sites set approximately four metres above the floor. The boxes are simple affairs; each has a wire bottom so that excess moisture can drain through and wooden sides. Nesting material is gathered by the keepers in early spring; moss is first scattered around the aviary and when that has been used, small sticks and grasses are "thrown in". Of the four birds, we have 2 pairs; only one pair had chosen to nest. Could this be an act of dominance or simply the other pair not coming into condition?

The birds had been DNA sexed so we know that we have two pairs. However, if one was unaware of this fact, it would be quite difficult to sex them visually, although males are said to be a little larger. Nesting started on the 14th March 2014 and material was steadily added as the days went by, by both male and female. Keepers would "throw in" a hand full of moss and grasses each day and the pair would appear to delight in riffling through it, finding that perfect stick to add to the nest. At this point, it must be stressed that the other Ibis took no part or showed any interest in the nest or even the nesting material.

Mating was witnessed for the first time on 22nd March 2014. It took place on the nest site and has been witnessed several times since. The female started to spend time on the nest on 24th March 2014, only coming off to eat. This routine continued until 1st April 2014 when the male was noted to be taking moss up to the nest and appeared to be passing it to the female who in turn was tucking it underneath herself. The nest was checked on 4th April 2014 and was found to contain two rather elongated whitish eggs. Both eggs were measured and gave us a mean of 66.03 mm length by 34.06 mm width. On consulting the zoo's curator, the eggs were pulled. The idea behind this decision was to allow the birds plenty of time to be able to double clutch if they chose to.

Nesting material was added daily to the pen and once again the male started to carry it up to the nest site and the female joined in by arranging the material. This commenced on 14th April 2014 and just as before, the other pair showed no interest in the nesting pair's activities. Mating was observed this time on 22nd April 2014. Mating itself appears to be a rather quick affair, lasting only a few fleeting seconds. Courtship appears fairly non-existent with little, if indeed any, head bobbing as in the Waldrapp Ibis *Geronticus eremita*. No plumage changes have been noted either, unlike the Straw Necked Ibis *Threskiornis spinicollis* with its rather amazing change of colour on the bare areas of skin on their flanks. This goes unnoticed until the birds display to one another by lifting their wings and "flashing" the blood red indicator to their would-be mate. Bill clapping appears to take place for a few seconds prior to and following mating. The male has been seen, prior to mating, probing the female with his beak and grabbing her wing or beak as if to "test the water". In fact, when one looks at the plumage of the Southern Bald Ibis before and during the breeding season, they look almost identical. This is rather interesting as they do possess a strange, rather waxy looking protuberance on the top of their heads which one might think would play some role as an indication of readiness, but it really has not changed shape or colour during the time that the birds have been with us. One would have thought that this may swell or darken and this invites further investigation. Hopefully when we have another breeding season under our belts, we can assess what role this rather unique part of their anatomy plays in the breeding cycle of the Southern Bald Ibis.

As with the first clutch of eggs, the female sat tight only coming off to feed and to have a bath on warm days in the stream that flows through the aviary. The male would perch on the edge of the nest for short periods but then spend time with the other two birds probing for food or simply perching. The nest was checked on 1st May 2014 and it contained one egg. It was checked again on 15th May 2014 and now contained three eggs. As we have been experiencing a rather warm spring/summer this year, it was again decided to pull the eggs for artificial incubation with the hope that the birds would nest once more this season. One thing that is noteworthy is the quite remarkable noises that the Southern Bald Ibis emit; they have a very high pitched raspy call. It is rather quiet when you compare it to the Ibis in adjoining aviaries here at the zoo such as the incredibly loud Hadada Ibis *Bostrychia hagedash* or the Black Faced Ibis *Theristicus melanopis* which can also be rather raucous when the need arises.

The weather on Exmoor can be fairly rugged and changeable with cold wet winters and warm wet summers. It became quite obvious that our four didn't cope with "our" winter too well. On

February 2nd 2014 at final feed round, one bird was found on the floor somewhat comatose. It appeared to have flown into the window of the aviary. The bird was subsequently relocated to the zoo's bird hospital room and placed under heat. The next day, the bird appeared none the worse for its ordeal and was behaving as if nothing had happened to it. That very same day, another bird was displaying the very same "symptoms" and was again relocated to the hospital unit. The next day it also appeared fine. The decision was taken to move all four "off display" into a completely sheltered aviary for the rest of the winter period. This aviary had the extra luxury of having heated perches. We have three pairs of Chestnut-naped Imperial Pigeon *Ducula aenea paulina* that live in the immediate vicinity, off display, which also require the heated perches to allow them to cope well with our winter, allowing the birds ample opportunities to warm up their toes on cold days. The birds eventually went back out on 11th March 2014 and no further problems with health have been noted.

Exmoor Zoo holds the following species of Ibis and Spoonbill at this present time;

1. **Southern Bald Ibis** *Geronticus calvus*

In the collection since 2013. Breeding took place for the first time 2014.

2. **Waldrapp Ibis** *Geronticus eremita*

In the collection since 2007. Breeding took place for the first time in 2012.

3. **Straw-necked Ibis** *Threskiornis spinicollis*

In the collection Since 2008.

4. **Puna Ibis** *Plegadis ridgwayi*

In the collection since 2013.

5. **Glossy Ibis** *Plegadis falcinellus*

In the collection since 2013.

6. **Scarlet Ibis** *Endocimus ruber*

In the collection since 2001. Breeding took place for the first time in 2010.

7. **Black-faced Ibis** *Theristicus melanopis*

In the collection since 2008. Breeding took place for the first time in 2012.

8. **Buff-necked Ibis** *Theristicus candatus*

In the collection since 2014.

9. **Hadada Ibis** *Bostrychia hagedash*

In the collection since 2012. Bred for the first time in 2013.

10. **Oriental Ibis** *Threskiornis melanocephalus*

In the collection since 2012.

11. **European Spoonbill** *Platalea leucorodia*

In the collection since 2008. Breeding took place for the first time in 2010.

All are fed twice a day: firstly at 8 am, secondly at 4.30 pm. Food is made up en masse the night before and stored in a fridge. The diet for Exmoor Zoo's four Southern Bald Ibis is as follows:

- Soaked Ibis pellet, approximate weight when soaked 340 grams.
- Lamb mince, approximately 120 grams.



- 8 day old chicks that have been quartered.
- 1 crumbled slice of brown bread.

We give one “extra” food item a day to all the Ibis from the following:

- Forthglade, approximate weight 10 grams.
- Frozen prawns, approximately 10 grams.
- Grated cheese, approximately 10 grams.
- Scrambled egg, approximately 10 grams.
- Sand eels, approximately 10 grams.
- Horse meat, approximately 10 grams.

The extra food gives the Ibis different shapes and textures. This appears to keep them stimulated by what has been presented to them.

Two chicks were hatched in the zoo’s rearing centre in a hatcher, set at 36.5°C with as much humidity as possible. The first chick appeared to be nice and strong and weighed 45 grams. The second chick looked rather pathetic and weighed 34 grams. Both were transferred to a brooder set at 36°C with a pint glass filled with water for humidity. The chicks were kept separate within the brooder in small tubs with paper towel as a base as well as moss and small sticks to exercise their feet and to prevent leg problems. For the first day, the chicks were given only boiled water with an added pinch of Avipro through a 1ml syringe. This hopefully would give the young plenty of time to absorb their yolk sac. They then moved on to our hand rearing mix which is made up from the following:

- Soaked Ibis pellet, approximately 100 grams.
- 3 pinkie mice.
- Insectivorous mix, approximately 30 grams.
- Forthglade “natural chicken”, approximately 48 grams.

Filtered boiled water is then added to the ingredients, placed in the blender and mixed until all the lumps have dissipated. A pinch of Avipro is added to each feed as well as a pinch of Nutrabol to two of the feeds in the day. The mix is fed at 36°C and is very watery for the first few days, fundamentally to keep the young hydrated and as the days go by, the mix is slowly thickened until it has the texture of porridge. For the first ten days the young Ibis was fed every two hours, starting at 6am and finishing at 10pm. The feeds were gradually spread out to every four hours and then at six hour intervals. The diet changed soon after the chick was ten days old, with the rearing mix gradually being phased out and being replaced at first with pinkie mice, rat pups, day old chick legs and soaked Ibis pellets. Extra fur was added into the diet at day twenty in the form of small/medium mice.

The first chick appeared strong with good head and neck movement, eagerly accepting the water that was offered. The second did not. The bird was not able to hold its head up to

accept water, so was “cradled” with thumb and fore finger being placed gently on either side of its head. This procedure did allow the bird to swallow the water given to it. Unfortunately the following day the second chick was found dead.

Luckily at the same time as the Southern Bald was being hand reared, we had a young Black-faced Ibis. This bird was about six days older than the Bald Ibis but it was deemed appropriate to put them together for the rearing process as a companion to hopefully prevent imprinting. The first chick began to steadily grow, the eyes fully opened on 5th May 2014. On 16th May 2014, it was noted that the young Southern Bald was being very aggressive towards the young Black-faced, stabbing it around the eyes and head. It would apparently only happen at feed times. I lost count of the number of times that I would “spy” on the two chicks to ensure that this behaviour was not happening constantly to find them sitting tucked up side by side. However, the pecking became more intense, leading to the two being separated for the rest of the rearing process.

The Southern Bald youngster’s behaviour does pose a question: whether this is species specific behaviour, with all Southern Bald chicks showing a form of ritualised aggression of dominance, or whether it is simply an individual trying to compete for food with a slightly larger “sibling”. Hopefully as the 2014 season carries on, we will learn more. The chick is now 30 days old and has not changed in demeanour one bit. It is still very alert and appears very aggressive. When the bird has access to a much larger area to exercise in, it does so on its own, because as soon as it sees the Black-faced chick, it makes a bee-line for it. The chick has now developed long sheath enclosed feathers on its wings and back and at thirty five days old is being exercised outside in the sun when the weather allows. It is no longer aggressive or noisy and the only time it vocalises is when it recognises its keeper. Then it emits a few “clink, clinks” before reverting to being a rather quiet bird.

We have now been fortunate to hatch out another chick. This little bird was assisted when hatching, as it appeared unable to hatch on its own, spending two days trying to do so. The chick was left in the hatcher for the remainder of the day and was bleeding quite heavily from its umbilicus. This was treated with Terramycin spray. The chick weighed 43 grams which we feel is an average hatch weight. The egg that the chick was hatched from was also kept for closer inspection once the chick had been tended to. It was very bloody inside and the young Ibis had passed faeces, but the interesting thing about the egg was that it seemed thicker shelled than the others the birds had laid and appeared to contain a thick membrane that was virtually fully intact. Is it possible that this was the reason for the chick being unable to emerge from the egg? Humidity levels are always questioned when this happens but we had a European Spoonbill hatch perfectly in the same hatcher on the same day.

Meanwhile, while the chicks were being reared, the parents have relentlessly carried on with the advancement of their species. The dominant pair was seen mating once more on 1st May 2014 with the male carrying nesting material to the waiting female, standing expectantly on her nest. The male was seen pulling fresh grass out of the ground on 3rd June 2014, carrying it up to the, now sitting, female. Again he would perch on the edge of the nest to drop the material in front

of the female and she would then spend time “tucking it” around her and her eggs.

The first chick, at time of writing, is now weaned and living together with the same young Black-faced Ibis that it spent its first few days with. Both birds get on fine and the Southern Bald only gets vocal and aggressive when food is offered. Likewise, the second chick does appear highly strung; it spends time biting itself when food is being prepared for it and as soon as it sees any other bird, it starts to call and makes a bee-line for them. Keeping the Southern Bald Ibis has resulted in all manner of interesting observations and challenges which we will document as time goes by, helping us understand a little more about this rather fascinating and wonderful bird.

#### Products mentioned in the text:

1. Ibis diet, manufactured by Charnwood Milling Company Ltd, Framlingham, Suffolk. [www.charnwood-milling.co.uk](http://www.charnwood-milling.co.uk)
2. Terramycin spray, manufactured by Pfizer Ltd, Sandwich, Kent.
3. Avipro, manufactured by Vetark Professional, Winchester, Hampshire.  
[www.vetark.co.uk](http://www.vetark.co.uk)
4. Nutrabol, manufactured by Vetark Professional, Winchester, Hampshire.  
[www.vetark.co.uk](http://www.vetark.co.uk)
5. Forthglade, Forthglade foods Ltd, Winkleigh, Devon. [www.forthglade.com](http://www.forthglade.com)



## NEWS & VIEWS

### HORNBILL WATCH

Hornbill Watch is a fascinating website for Hornbill conservation in India. It has a gallery for photos and a section for reporting sightings. It is worth a look at [www.hornbills.ingallery.php](http://www.hornbills.ingallery.php) and from there you can navigate the site for other fascinating information on Indian Hornbills and to a lesser extent, Asian Hornbills in general.

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### LONGEVITY IN A LESSER FLAMINGO

The Ringing Scheme of East Africa has just received news of a Lesser Flamingo *Phoenicopterus minor* that was found freshly dead at Lake Baringo on 13th February this year with a ring. The incredible thing about it is that the ring was a BTO ring (British Trust for Ornithology) that was one of those rings used on a batch of several thousand Lesser Flamingo chicks that bred at Lake Magadi in....1962!!

This bird was in fact ringed by none other than the very well-known Leslie Brown on 1st November 1962 making it 50 years, 3 months and 25 days old!

It must surely be the oldest recorded Lesser Flamingo and it is amazing that it lived for so long. A few years ago there was one recovered also at Magadi that was about 45 years old - there may be one or two more out there with rings from that time! If anyone reads this that knows more about that ringing event of Lesser Flamingo chicks in 1962 - or was perhaps even there and took part - it would be really interesting to know the full story.

I believe many of the chicks had got 'anklets' of encrusted soda which had formed around their legs and were acting as a 'ball and chain' thus killing the birds. Rescuers acted by breaking the balls of encrusted soda off and putting rings on, were thus saving the lives of many flamingos - some to live for over 50 years!

The person who found the flamingo is Nick Armour of Swavesey, England, to whom we are indebted for reporting the recovery of the ring. The distance from ringing site to recovery site is 242kms.

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### RED-BILLED CHOUGHES

The sight of Red-billed Choughs *Pyrrhocorax pyrrhocorax* cavorting and playing in the wind along the coastal regions of the more rugged parts of the UK is one of the joys of being in those areas. Population numbers are steady with a slight increase in some regions and even a population colonising the Lizard Peninsular in Cornwall where they had disappeared some

years previously.

Jersey residents are now also likely to be in a position to see these active and gregarious members of the crow family thanks to a breeding and release programme by Durrell Wildlife Conservation Trust with birds bred there and at Paradise Park. More details can be found on [www.birdsontheedge.org](http://www.birdsontheedge.org) giving much more information.

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## TOOTH-BILLED PIGEON SIGHTED AGAIN

The Tooth-billed Pigeon *Didunculus strigirostris*, nicknamed the “Samoan Dodo” and locally known as Manumea has been sighted again after a ten year absence. This strange looking Columbidae is endemic to Samoa and is the country’s national bird.

Inhabiting the dark interiors of some of the forest’s tallest trees it is a very difficult bird to observe, and coupled with hunting pressure and habitat loss, it was thought to be critically endangered, if not extinct.

Researchers, funded by the Conservation Leadership Programme, and working alongside a team from the Samoan Ministry of National Resources and Environment were working on the island of Sava’i. Camped in the forest, one of the researchers went to hang out his wet clothes on the line when he heard a noise that attracted his attention. Close examination through binoculars revealed the perpetrator was no less than a young Manumea perched high in the canopy.

Research will now concentrate on southern Samoan island of Upolu in the hope of finding it there. Efforts are now being stepped up to help save this species.

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## VULTURES AND DICLOFENAC

The powerful drug Diclofenac that has caused such devastation amongst the vulture populations of the Indian subcontinent has now become available in certain parts of Europe. Authorised for use in Spain and Italy, it is reported to have become available fairly widely in the EU. Over 80% of European vultures of four species are to be found in Spain and Italy and it is to be hoped that pressure now being applied can persuade governments to implement a complete ban before it is too late. Some populations in India are showing signs of recovery after a ban but it would now seem that some African populations are about to come under threat. Other anti-inflammatory drugs are available so perhaps a global ban might be the answer!

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## WEAVERS WEBSITE

Weavers are another family that has its own website. Go to [weavers.adu.org.az/](http://weavers.adu.org.az/) to find photos, information and maps on the Old World family.

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## WILDFOWL AND WETLAND TRUST HISTORY OF SCIENTIFIC PUBLISHING AVAILABLE ON LINE

Anyone interested in conservation now has free access to the entire catalogue of papers published by WWT in its scientific journal, Wildfowl.

The new online resource is the culmination of months of work by volunteers to digitise printed copies of Wildfowl dating back to 1947, when it first appeared as the Annual Report of the Severn Wildfowl Trust.

WWT hopes that budding researchers and waterbird enthusiasts will be encouraged by opening the vaults on some of the most significant moments in ornithological history.

Wildfowl online is fully searchable, giving the work of contributing scientists a far greater reach and influence.

[www.wwt.org.uk/news/news/2014/02/wwt-news/available-to-all-wwts-entire-history-of-scientific-publishing/](http://www.wwt.org.uk/news/news/2014/02/wwt-news/available-to-all-wwts-entire-history-of-scientific-publishing/)

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## NEWS ITEMS WANTED

News & Views has been a part of the Avicultural Magazine for a good many years and is an excellent vehicle for snippets of information and interesting comments. The Society gets a number of magazines from other societies, both ornithological and avicultural, and it is from these that many items are gleaned. Complete articles are always welcome, but if you feel unable to write a full account, why not send a few notes for publication in News & Views.

Please send any short items to [dave.coles@bealepark.co.uk](mailto:dave.coles@bealepark.co.uk), they can be literally anything to do with birds.



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